

Algebra

Name: \_\_\_\_\_

Mrs. Britton

Consistent and Inconsistent Systems Date: \_\_\_\_\_

Solve each system of equations. **\*\*SHOW ALL YOUR WORK\*\***

1. $\begin{cases} y = -3x + 2 \\ y = 2x + 2 \end{cases}$	2. $\begin{cases} y = -x + 4 \\ y = -x + 5 \end{cases}$
3. $\begin{cases} y = 4x - 2 \\ y = 4x - 2 \end{cases}$	4. $\begin{cases} 5x - 3y = 4 \\ 10x - 6y = 8 \end{cases}$
5. $\begin{cases} -2x + 3y = 4 \\ 2x - 3y = 8 \end{cases}$	6. $\begin{cases} y = -2x - 4 \\ 2x + y = 6 \end{cases}$

7. $\begin{cases} 4x + y = 8 \\ y = 4 - 2x \end{cases}$	8. $\begin{cases} -4x + 2y = 8 \\ y = 2x + 4 \end{cases}$
9. $\begin{cases} x + 6y = 8 \\ x = -6y + 8 \end{cases}$	10. $\begin{cases} 8x + 3y = 7 \\ 3x + 2y = 7 \end{cases}$

Explain how you know this system is inconsistent without graphing:

$$\begin{cases} y = -3x + 2 \\ y = -3x - 5 \end{cases}$$

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